

Wednesday, 02/04/2008 3:39:25 PM
Julie Lecocq

Process Sheet

SPUD

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 38335
 Estimate Number : 10026
 P.O. Number :
 This Issue : 02/04/2008 S.O. No. :
 Prsht Rev. : NC
 First Issue : / / Type : RMA
 Previous Run : 29116
 Written By :
 Checked & Approved By : JO 08.04.03
 Comment : Est Rev:B 00.12.06 Added: Issue P/O EC

Drawing Name : CROSSTUBE EXTRUSION (206B)
 Part Number : D6003102
 Drawing Number : D6003 REV A
 Project Number : N/A
 Drawing Revision : A
 Material :
 Due Date : 20/11/2008 Qty: 39 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 PG PURCHASING



Comment: PURCHASING

Issue P/O 6064

C 08/04/04

(39)

- a) Extrude as per Dwg D6003
- b) Material: 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless aluminum tube
- c) Minimum ultimate tensile strength = 77 ksi
- d) Minimum tensile yield strength = 66 ksi
- e) Material certification required

2.0 D6003102P Crosstube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 39.0000 Each(s)
 Crosstube

3.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage
 Ensure material certification is attached

P 8/10/17

P 8/10/17 (10) (41)

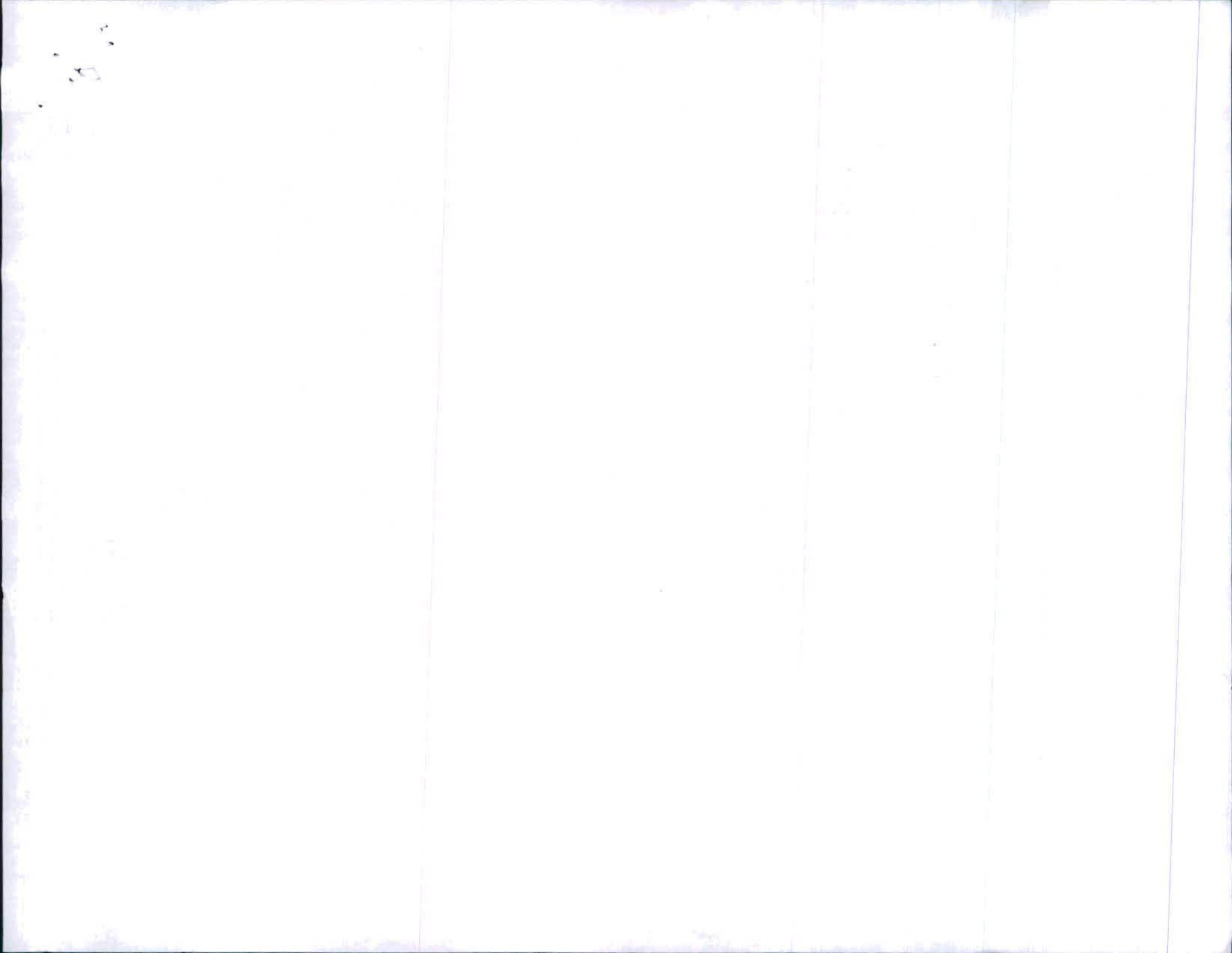
4.0 QC6 DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6003

S 08/10/17 (41) countes



Process Sheet

Order: CU-DAR001 Dart Helicopters Services

Drawing Name: CROSSTUBE EXTRUSION (206B)

Number: 38335

Part Number: D6003102

Number:



Seq. #:

Machine Or Operation:

Description :

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

N/A

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

hallway

41

SL 8-11-15

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/11/17

Job Completion



W 08.11.17



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>A</i>	APPROVED <i>A</i>	DRAWING NO. D6003	REV. A SHEET 1 OF 1
DATE 00.11.22		TITLE CROSSTUBE MATERIAL	SCALE 1:1
A	00.11.22	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
00 11 24 *A*



NOTES

- 1) D6003-XXX CROSSTUBE
LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 102" LONG TUBE: D6003-102

REFERENCE ONLY

Mo 38335

- 2) MATERIAL: 2.250 OD x 0.435 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.006 MEAN (± 0.012 INCLUDING OVALITY)
WALL: ± 0.020 MEAN (± 0.044 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.125/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

Copyright © 2000 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

RECEIVED

5/26/14

Boxmarking:

We hereby declare that the wooden packing material are totally free from bark and apparently

Boxdimension

[illegible]

Abnahmeprüfzeugnis 3.1 - EN 10204:2004

Inspection Certificate 3.1 - EN 10204:2004 / Certificat de Reception 3.1- EN 10204:2004

Kunde: Dart Aerospace Ltd.
 Client: 1270 Aberdeen Street
 K6A1K7 Hawkesbury, ON Canada

Zeugnisnummer: 1551/08

Cert No.: / No. du certificat:

Bestellnummer: PO00006064

Order No. / No. de commande

Auftrag: 29105/1

Our Reference/Notre Reference:

Produkt: Rohre nahtlos gepresst
 Product / Produit: Tubes seamless extruded

Spezifikation: AMS - QQ - A - 200/11E; Spezifikation Dart Aerospace D6003
 Specification:

Werkstoff: 7075
 Alloy/Alliage:

Zustand: T 6511
 Temper/État

Abmessung: 2,250 INCH x 1,380 INCH x 0,435 INCH x 102,000 INCH
 Size / Dimension D6003-102 2.250 x 0.435 x 102

Kennzeichnung: ALUnna - Cert No. 1551/08 - 7075 - T 6511 - Cast No. 82040 - AMS QQA 200/11 - 2.250" OD X 0.435" Wall - Heat
 Marking/Marquage: Lot No. 1937 - ALUnna Order conf. No. 29105/1-2 PO. 00006064

Lieferung: pcs lbs
 Delivered Material / Matériel délivré: 41 1058 **Country of Manufacture: Germany**

1. Chemische Analyse Chemical Analysis / analyse chimique

Charge/ Cast No.	min.	max.	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni
			0,40	0,50	1,2	0,30	2,1	0,18	5,1						
					2,0	0,30	2,9	0,28	6,1	0,20					
82040			0,09	0,17	1,44	0,08	2,5	0,18	5,91	0,03	0,01	0,03	0,01	0,01	0,0001

Hydrogen content: 0,10 ccm/100 g Al Elements without indication < 0,01 % country of melt manufacturer: Germany

2. Mechanische Eigenschaften Mechanical Properties / Valeurs Mécaniques

Anforderungen Requirements	tensile (Rm) ksi	yield (Rp0,2) ksi	elongation 2" %	elongation A %	Hardness HB	Heat Lot No.
min.	77,0	66,0				
max.						
1	85,840	79,315	10,0			1937 - 41 pcs.
2	88,015	81,635	10,0			

RMS: outside 25 - max. 16,4 µ"

Ergebnis der Prüfungen: Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test results: We confirm that the delivery has been tested and applies to the agreements made on receipt of the order
Resultats: Nous confirmons que la livraison a été contrôlée et correspond avec les conventions faites à la réception de la commande

Kramper



Certified acc. DIN EN ISO 9001:2000 and DIN EN 9100:2003
 valid until 2010.11.11

[Signature]

